



Timbalier Island Dune and Marsh Restoration (TE-40)

Project Status

Approved Date: 2000 **Cost:** \$20.2 M
Project Area: 663 acres **Status:** Construction
Net Benefit After 20 Years: 273 acres
Project Type: Barrier Island Restoration

Location

Timbalier Island is located south of Terrebonne Bay and west of East Timbalier Island in Terrebonne Parish, Louisiana.

Problems

Timbalier Island is migrating rapidly to the west/northwest, which is a clear indication of the dominant influence of longshore sediment transport processes (the movement of beach material by waves and currents) along the island. Thus, the western end of Timbalier Island is undergoing lateral migration by spit-building processes, at the expense of erosion along the eastern end, while the island overall is shortening and narrowing. This loss can be attributed to an inadequate sediment supply, relative sea-level rise, and the passage of storms. Without mitigating efforts, Timbalier Island is projected to disappear by the year 2050.

Restoration Strategy

The objective of this project is to restore the eastern end of Timbalier Island through the direct creation of dune and marsh habitat. The project boundary is divided into Areas A and B. Area A will be restored through direct creation of dune and marsh on the east end of Timbalier Island. Area B will be enhanced through addition of sediment into the nearshore system, maintaining the west/northwest migration of the island and attenuation of wave energy.

Specifically, the project includes restoring the beach rim and dune system. The project will also create a marsh platform on the bay side of the island. The marsh platform will be built around existing marsh with minimal impact. Over three million cubic yards of dredge material will be used in this project. Vegetation will be planted and sand fencing will also be placed on the dune to help capture and retain wind blown sand.



View to the east of the low relief, sparse vegetation and imminent breaches that typify the eastern end of Timbalier Island.

Progress to Date

Construction funding was approved by the Louisiana Coastal Wetlands Conservation and Restoration Task Force in January 2003. Plans and specifications have been finalized and the State of Louisiana is preparing to advertise for bids to construct the project. Construction is expected to begin summer 2004.

This project is on Priority Project List 9.

For more project information, please contact:



Federal Sponsor:
U.S. Environmental Protection Agency
Baton Rouge, LA
(225) 389-0735



Local Sponsor:
Louisiana Department of Natural Resources
Baton Rouge, LA
(225) 342-7308

Terrebonne Bay

Cat Island
Pass

B

Timbalier Island

Cailion Pass

A

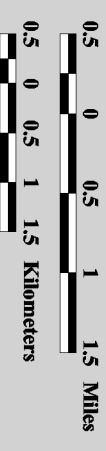
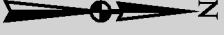
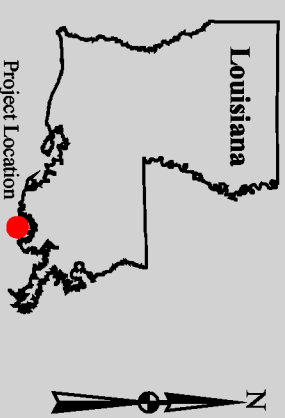
Brush Island

Gulf of Mexico

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Project Boundary



Map Produced By:

U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
2002 Thematic Mapper Imagery

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